



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,871 03/14/2001		Ben Folk-Williams	M-11459 US	3400
33438 7	7590 12/17/2003		EXAMINER	
HAMILTON & TERRILE, LLP P.O. BOX 203518			THAI, HANH B	
AUSTIN, TX 78720			ART UNIT	PAPER NUMBER
,			2171 DATE MAILED: 12/17/2003	/٥

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	icant(s)			
	09/805,871	FOLK-WILLIAMS ET AL.			
· Office Action Summary	Examiner	Art Unit			
*	Hanh B Thai	2171			
The MAILING DATE of this communication appears on the cover sheet with the correspondenc address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status					
1) Responsive to communication(s) filed on 29 O	<u>ctober 2003</u> .				
2a)⊠ This action is <b>FINAL</b> . 2b)□ This	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 1-57 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) □ Claim(s) 1-57 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
<ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>					
Priority under 35 U.S.C. §§ 119 and 120					
12)					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)			

Art Unit: 2171

This is in response to the amendment filed October 29, 2003 in which claims 52-57 have been added.

## **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments with respect to claims 1-57 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Claims 1-20, 23-24 can not depend on the greater claim 52;

Claims 21-22, 25-37 can not depend on the greater claim 54; and

Claims 38-51 can not depend on the greater claim 56.

They must be renumbered consecutively. Correction is required.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2171

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

2. Claims 52, 54 and 56 are rejected under 35 U.S.C. 102(e) as being anticipated by Sarkar (U.S. Patent no. 6,012,067) of record.

Regarding claims 52, 54 and 56, Sarkar discloses a method allowing application programs to access a database through an interface, wherein the interface includes knowledge of a schema of the database, the method comprising:

- receiving a request to the interface from one of the application programs to access the database (see col.5, line 15-18 and col.6, line 52 to col.7, line 9, Sarkar);
- providing to the requesting application an aggregate classifier based on classifier definitions of a schema abject, wherein the schema object includes a representation of a schema of the database (see Fig.2,7,9; col.5, line 19-34 and col.10, line 46-62, Sarkar). "attribute" of the schema object corresponds to an aggregate classifier;
- receiving one or more requests from the requesting application (see col.9, line 32-46, Sarkar);

Art Unit: 2171

- interrogating the schema object for location information of classifiers of the database (see col.5, line35-38 and col.9, line 47-64, Sarkar). "URL" corresponds to location information of classifiers of the database;
- providing the location information of the classifiers to the requesting application;
- associating search constraints from a request of the requesting application with locations in the database (see col.10, line 30-45, Sarkar); and
- generating a query to the database based on the search constraints (see col.9, line 39-43, Sarkar).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarkar (U.S. Patent no. 6,012,067) of record in view of Carey et al. (U.S. Patent 6,134,540) of record.

Regarding claims 1, 21 and 38, Sarkar further discloses the steps of:

- constructing a schema object to represent a schema of the database (see col.9, line 47-49, Sarkar); and
- manipulating the database using an aggregate classifier based on the schema object (see col.9, line 32 to col.10, line 6, Sarkar). The Schema in the object oriented system of Sarkar is a part of object system and it inherently has to be a schema object of the system.

Art Unit: 2171

Sarkar, however, does not explicitly disclose importing data into a database residing on a computer system. Carey, on the other hand, discloses this limitation (see col.11, line 6-9, Carey).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sarkar to include the step of residing the importing data on a server as taught by Carey. The motivation of doing so would have been to provide the ability of viewing object type in the memory (see col.16-19, Carey).

Regarding claims 2, 22 and 39, Sarkar/Carey combination further discloses the steps of: defining a plurality of classifier definitions corresponding to the schema of the database; and mapping the classifier definitions to columns and tables in the database (see col.9, line 47 to col.10, line 6, Sarkar).

Regarding claims 3-4, 23-24 and 40-41, Sarkar/Carey combination further discloses the defining step defines a "property" classifier which interacts with a single column on a single table in the database (see Fig.2, Sarkar).

Regarding claims 5-6, 25-26 and 42-44, Sarkar/Carey combination further discloses the defining step defines a "split-object" classifier that makes more than one "object" classifier appear as a single classifier (see Fig.9, col.11, line 26-42, Sarkar).

Art Unit: 2171

Regarding claims 7 and 27, Sarkar/Carey combination further discloses the step that defines a "mapped property" classifier as a special form of the "split-object" classifier to manage data stored in a table of the database that serves as an index to another database table (see Fig. 5 and col.10, line 7-15, Sarkar).

Regarding claims 8, 28 and 45, Sarkar/Carey combination further discloses the defining step defines a parameterized classifier (see col.7, line 65 to col.8, line 4, Sarkar).

Regarding claims 9, 29, 37, 46 and 51, Sarkar/Carey combination further discloses modifying the schema of the database and constructing a schema object (see Abstract of Sarkar).

Regarding claims 10 and 30, Sarkar/Carey combination further discloses the step of writing or re-writing classification definitions stored on the computer system (see Abstract, col.5, lines 31-52, Carey).

Regarding claims 11, 13, 31 and 47-48, Sarkar/Carey combination further discloses the step of writing or re-writing classification definitions stored on the computer system (see col.5, lines 31-52, Carey).

Regarding claim 12, Sarkar/Carey combination further discloses the writing step uses XML (col. 2, lines 1-6, Sarkar).

Art Unit: 2171

Regarding claims 14, Sarkar/Carey combination further discloses the step parses an import file to import the data (see col.11, line 58-60, Sarkar).

Regarding claims 15, Sarkar/Carey combination further discloses the step of an application, residing on the computer system, interacting with a composite object included in the classification definitions (see col. 11, line 6-9, Carey).

Regarding claims 16-19 and 32-35, Sarkar/Carey combination further discloses the manipulating step includes the step of generating a SQL SELECT, INSERT, UPDATE or DELETE query using the query generator (see col.5, line 58-65 and col.7, line 3-5, Sarkar).

Regarding claims 20 and 36, Sarkar/Carey combination further discloses the step of an aggregate classifier interrogating the schema object to determine how different classifiers correspond to columns and tables in the database (see col. 5, line 40-48; col. 9, line 32-38 and col. 10, line 21-29, Sarkar).

Regarding claims 49, Sarkar/Carey combination further discloses the program instructions generate a search query using the schema object (see col. 10, line 7-29, Sarkar).

Regarding claims 50, Sarkar/Carey combination further discloses the schema object to determine locations of different classifiers in the database (see Fig.7 and col.10, line 46-62, Sarkar).

Art Unit: 2171

Regarding claims 53, 55 and 57, Sarkar discloses all of the claimed feature as discussed above, except the returning results of the query to the requesting application. Carey, on the other hand, discloses this limitation (see abstract and col. 5, line 32-35, Carey).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sarkar to include the step of returning results of the query to the requesting application as taught by Carey. The motivation of doing so would have been to provide the ability of viewing object type or schema in the memory (see col.16-19, Carey).

#### Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Carey (US 6,226,637) discloses a system for object building in queries over object views.

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Page 9

Application/Control Number: 09/805,871

Art Unit: 2171

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh B Thai whose telephone number is 703-305-4883. The examiner can normally be reached on 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Hanh Thai Art Unit 2171
December 10, 2003

UYEN LE AU 2171